

**IN THE SPECIFICATION:**

Beginning on Page 2, please amend the application as follows:

- [4] ISI phenomena may be modeled mathematically. In the case where the data signal D is populated by a number of data symbols  $d_n$ , captured signals  $x_n$  at the destination 120 may be represented as:

$$x_n = a_0 \cdot d_n + f(d_{n-K_2}, \dots, d_{n-1}, d_{n+1}, \dots, d_{n+K_1}) + \omega_n, \quad (1)$$

where  $a_0$  represents a gain factor associated with the channel 130,  $f(d_{n-K_2}, \dots, d_{n+K_1})$  is a functional representation that relates the ISI to the symbols,  $d_{n-K_2} \dots d_{n+K_1}$ , causing ISI corruption and  $\omega_n$  represents corruption from other sources. In linear systems, Equation 1 may reduce to:

$$x_n = d_n + \sum_{\substack{i=-K_1 \\ i \neq 0}}^{K_2} a_i \cdot d_{n-i} + \omega_n, \quad (2)$$

where  $a_{-K_1}, \dots, a_{K_2}$  represent the sample values of the impulse response of the channel. In accordance to common practice, the values  $a_i$  have been normalized by the value of  $a_0$  in Equation 2.

- [27] Alternately, the reliability factor R may be calculated from values,  $\hat{d}_n$ , of the decoded symbols at the output from the symbol decoder 210. In this embodiment, the evaluation of Equations 7 to 9 may be carried out as follows:

$$R(x_n) = \sum_{\substack{i=-K_1 \\ i \neq 0}}^{K_2} |\hat{d}_{n-i}| \cdot c_i, \quad (10)$$

$$\underline{R(x_n) = \sum_{\substack{i=-K_1 \\ i \neq 0}}^{K_2} |\hat{d}_{n-i}| \cdot c_i} \quad R(x_n) = \sum_{i=1_1}^K |\hat{d}_{n-i}| \cdot c_i \quad (11)$$

and

$$R(x_n) = \sum_{\substack{i=-K_1 \\ i \neq 0}}^{K_2} \sqrt{\hat{d}_{1_{n-i}}^2 + \hat{d}_{2_{n-i}}^2} \cdot c_i \quad (12)$$

Applicant: Eilon RIESS  
Serial No. 09/899,843  
Response to Office Action mailed June 17, 2005

respectively. In Equation 12, the parameters  $\hat{d}_{1_{n-i}}$  and  $\hat{d}_{2_{n-i}}$  respectively represent values of  $\hat{d}_{n-i}$  in first and second dimensions.